UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

July 1961

Part II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

CONTENTS

	Page
Weather Reporting in the Eastern Tropical Pacific Ocean.....	2
Sea surface Temperature Charts, Eastern Pacific Ocean, July 1961.....	2

Bureau of Commercial Fisheries
Biological Laboratory
P. O. Box 6121, Pt. Loma Station
San Diego 6, California

* Part I - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, Post Office Building, San Pedro, California

WEATHER REPORTING IN THE EASTERN TROPICAL PACIFIC OCEAN

Officials of the U. S. Weather Bureau have informed this laboratory that Navy Radio Balboa, NBA, has been approved by the World Meteorological Organization as a relay station for weather reports from ships operating south of the equator and from the west coast of South America to 120° W. longitude. Heretofore, provision had not been made for relay of reports from that area to "Observer San Francisco". This action should materially improve our sea temperature coverage in the eastern tropical Pacific.

In other action, the U. S. Weather Bureau has advised that it will station a ship visitation officer in the Canal Zone early in this fiscal year. This arrangement should greatly increase the number of temperature observations off Ecuador, Peru and Chile where our charts presently show scant coverage.

SEA-SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN JULY 1961

Acknowledgements

The following organizations and stations contributed data for the July 1961 charts:

U. S. Weather Bureau, San Diego, California
U. S. Weather Bureau Ship Visitation Office, Long Beach, California
U. S. Naval Communication Station Balboa, Fort Amador, Canal Zone
U. S. Navy Branch Hydrographic Office, Honolulu, Hawaii; Seattle, Washington; San Francisco and Wilmington, California
U. S. Coast Guard, Port Hueneme Light Station, Port Hueneme, California
U. S. Bureau of Commercial Fisheries, Biological Laboratories, Honolulu, Hawaii; La Jolla, California; Seattle, Washington

U. S. Bureau of Commercial Fisheries, Exploratory Fishing and Gear Research Base, Seattle, Washington
Fish Commission of Oregon by Robert Ayers
Hopkins Marine Station, Pacific Grove, California, by J. P. Balesteri
Humboldt State College by George Allen
Inter-American Geodetic Survey by Rene Cortes at Salina Cruz, Mexico; David Ortega at Manzanillo, Mexico; Romeo Valencia at Pt. San Jose, Guatemala; R. E. Pino at Pt. Armuelles, Panama; V. E. Castillo at Tumaco, Colombia; Gualberto Tapia at San Cristobal, Galapagos; Jose Lanchimba at La Libertad, Ecuador; T. Torres Talara, Peru; R. Celis at San Juan, Peru
Inter-American Tropical Tuna Commission, La Jolla and Terminal Island, California; Piura, Peru
Kelco Company, San Diego, California
Newport Beach Lifeguard Service, Balboa, California
Oregon State College by Bruce Wyatt
Pacific Oceanographic Group, Nanaimo, B.C., by H. J. Holister from observations by R. W. Collins at Quatsino Lightstation, J. Rylin at Cape St. James Light, B. Stuart at Amphitrite Point Light, J. M. Hartt at Langara Island Light
Scripps Institution of Oceanography, La Jolla, California by Margaret Robinson and Hans Klein
Ships Frances Salman, Trolleggen, Elin Haven, Besseggen, Kongsholm and Santa Maria

Charts

Figure 1.--Mean sea surface temperatures (°F) derived from approximately 8000 observations. Squares show temperature at weather-ship stations. Numerals on shore are temperatures at coastal and light stations.

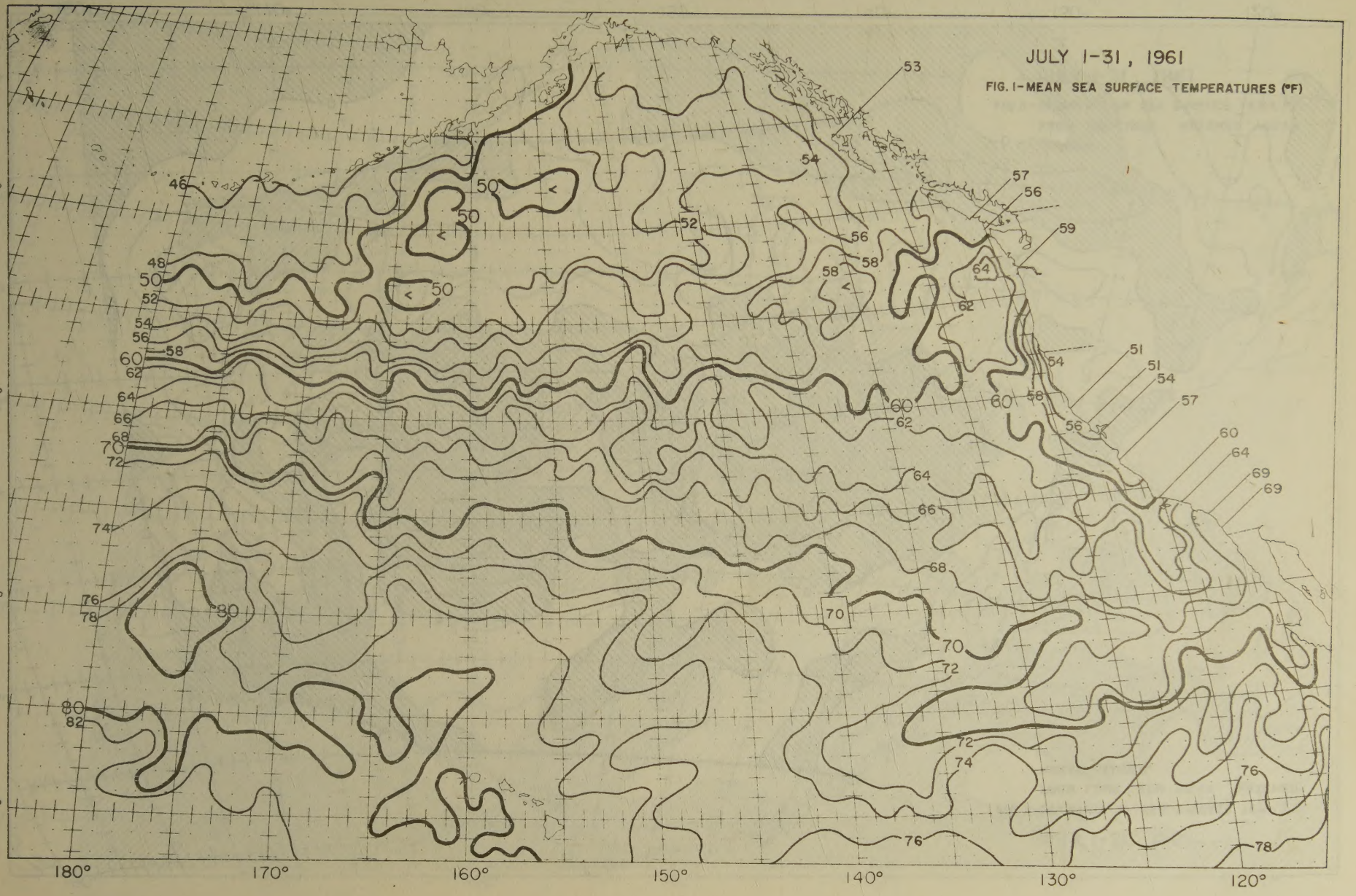
Figure 2.--Deviation of sea surface temperatures (°F) from long term mean charts of H. O. 225. Hatched areas are colder than mean.

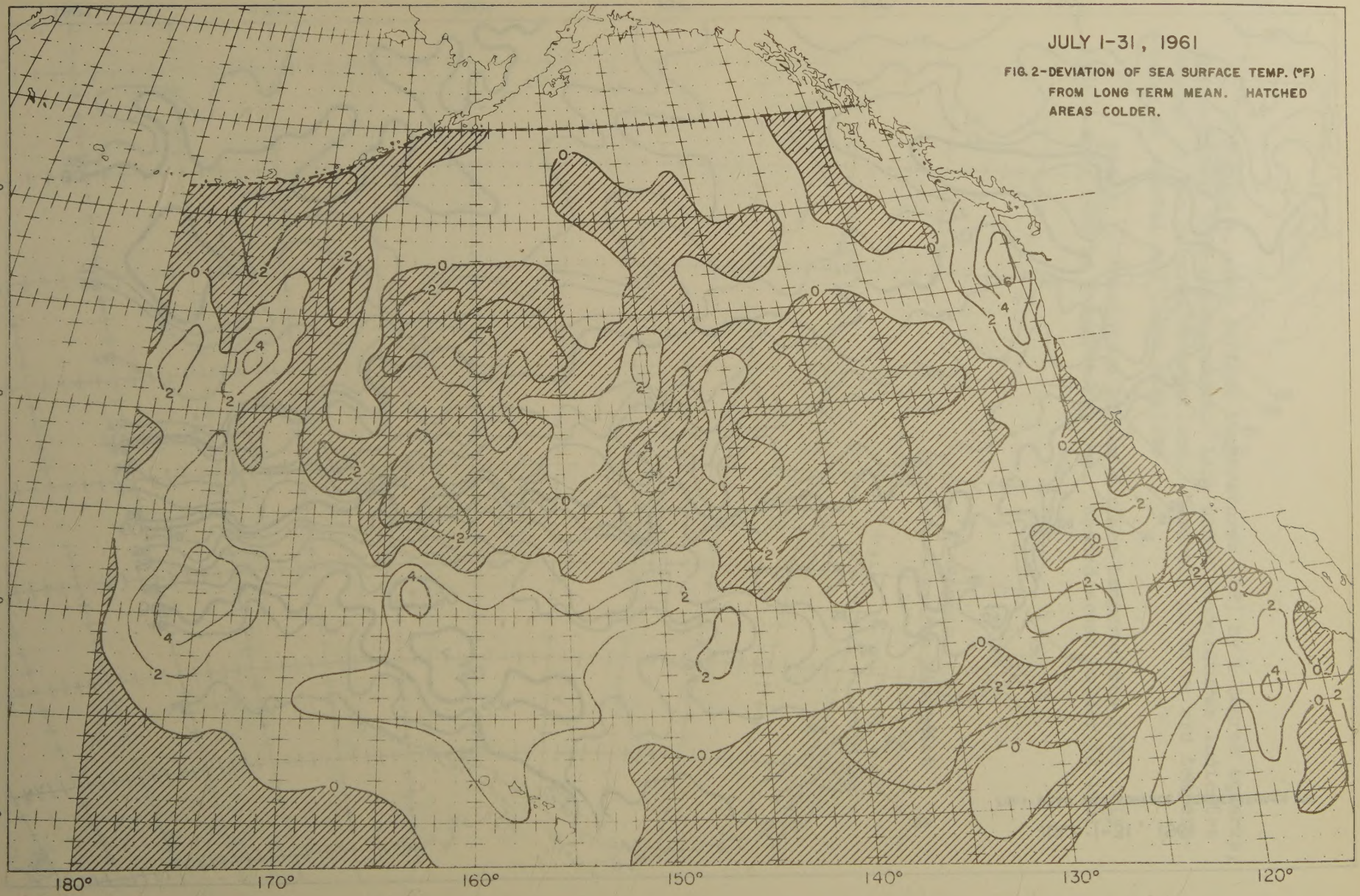
Figure 3.--Deviation of sea surface temperatures (°F) from those of July 1960. Hatched areas are colder than 1960.

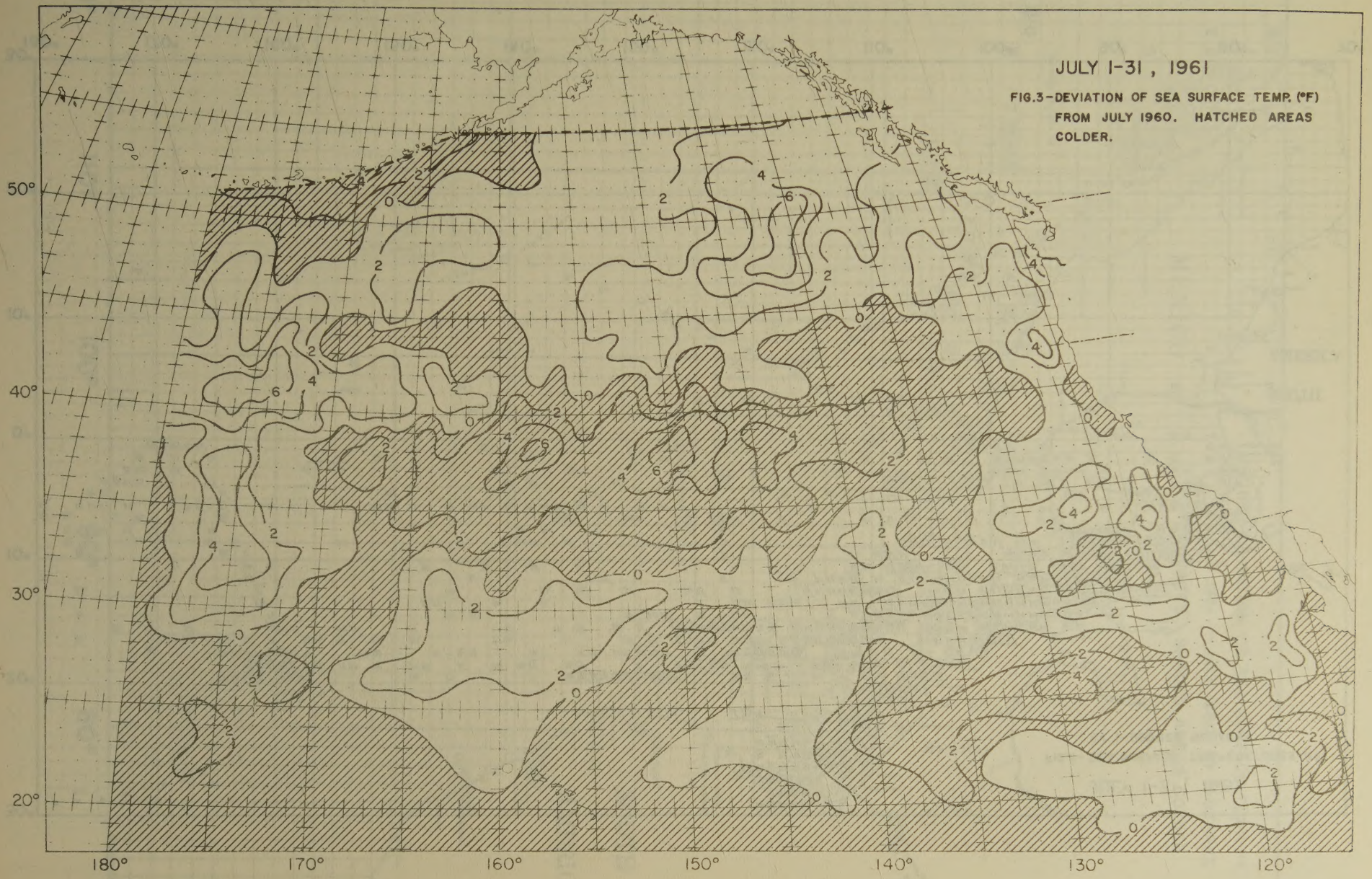
Figure 4.--Sea surface temperatures (°F) by 1-degree squares, approximately 2000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal and light stations.

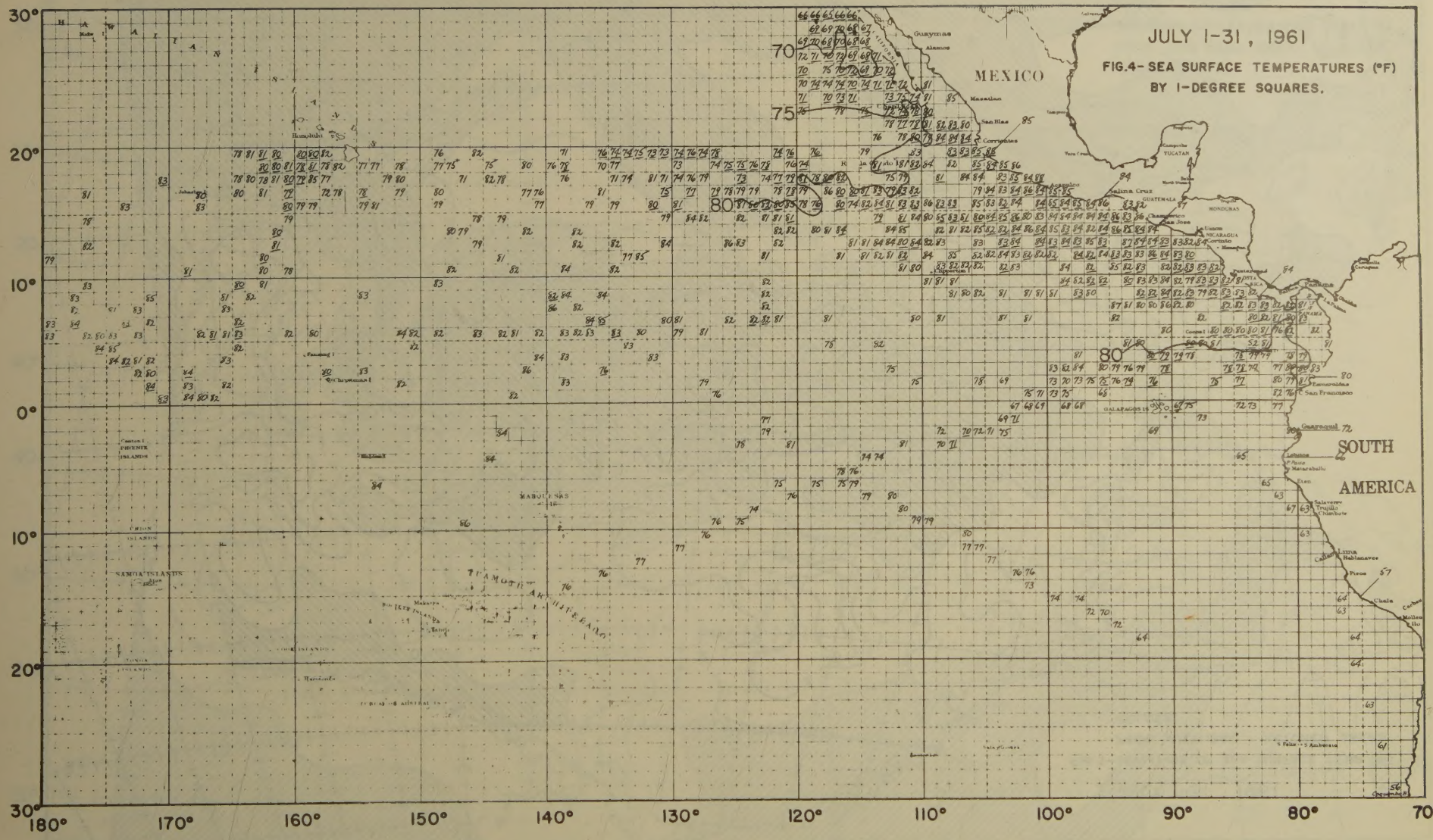
Figure 5.--Deviation of sea surface temperatures (°F) July 1961 - July 1960 by 1-degree squares. Shaded areas colder in 1961.

James A. Renner
Fishery Research Biologist


JULY 1-31, 1961
FIG. 1-MEAN SEA SURFACE TEMPERATURES (°F)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


JULY 1-31, 1961
FIG. 2-DEVIATION OF SEA SURFACE TEMP. (°F) FROM LONG TERM MEAN. HATCHED AREAS COLDER.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


JULY 1-31, 1961
FIG.3-DEVIATION OF SEA SURFACE TEMP. (°F) FROM JULY 1960. HATCHED AREAS COLDER.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


JULY 1-31, 1961
FIG.4- SEA SURFACE TEMPERATURES (°F)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
30°
20°
10°
0°
10°
20°
30°
180°
170°
160°
150°
140°
130°
120°
110°
100°
90°
80°
70°

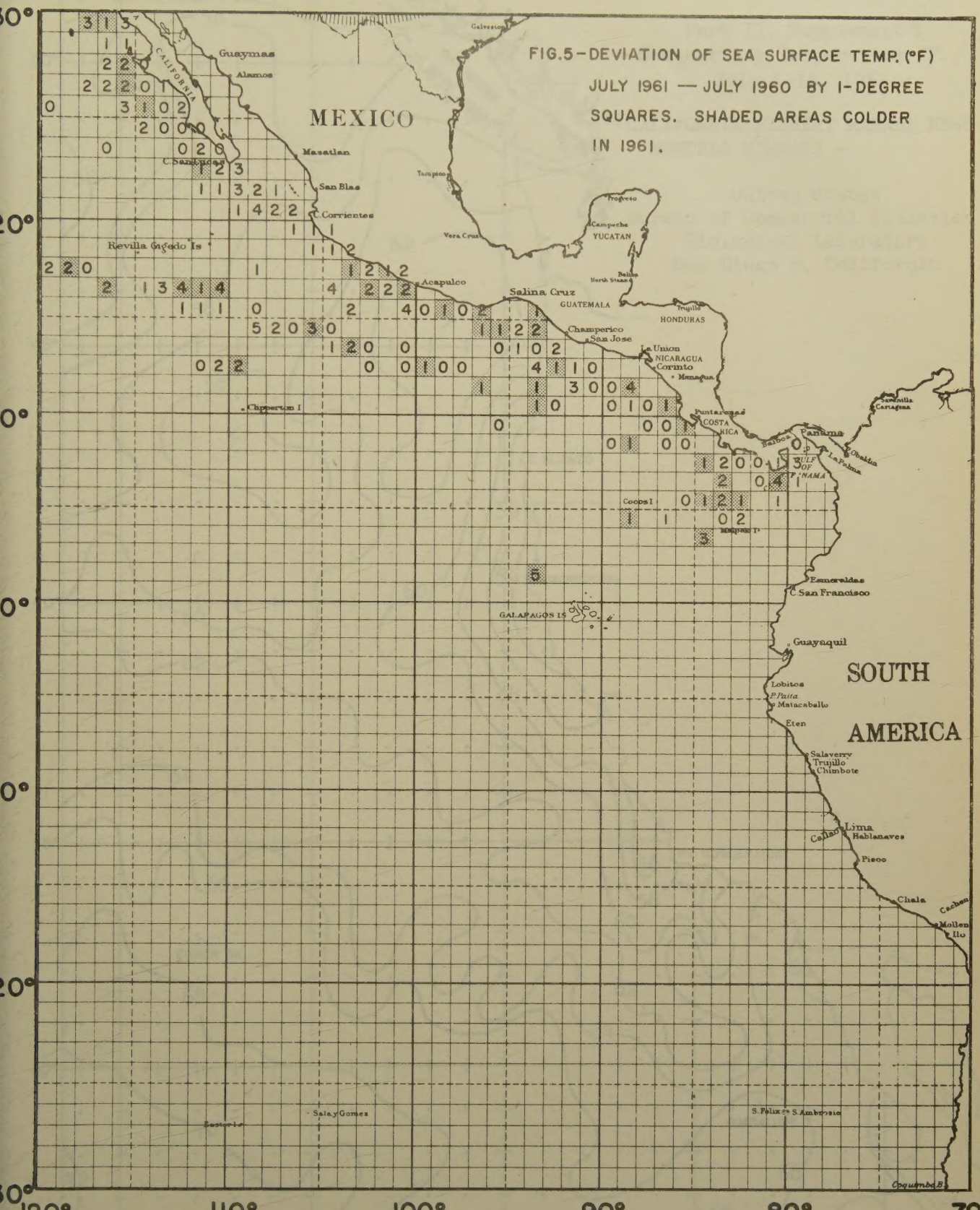
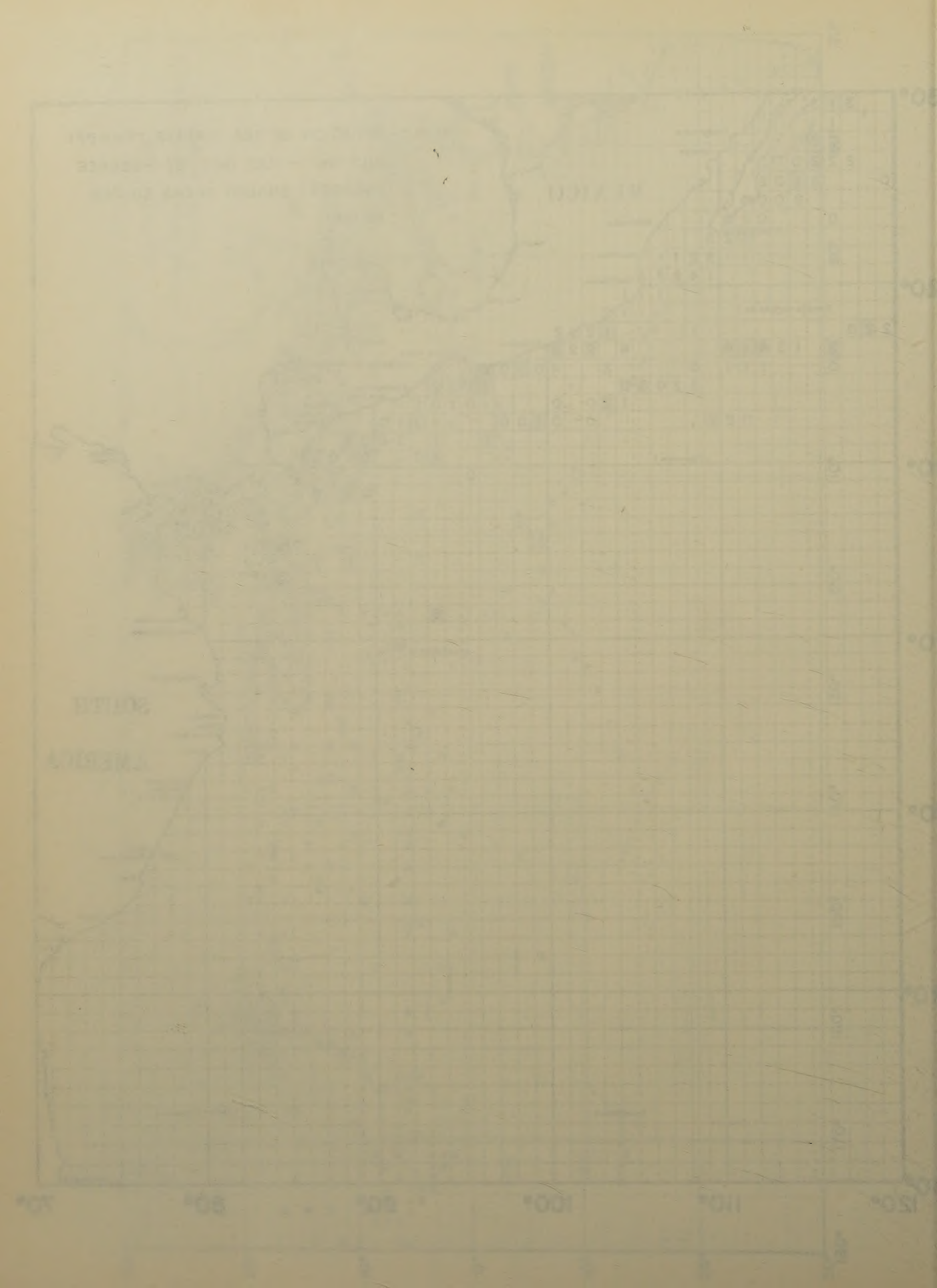
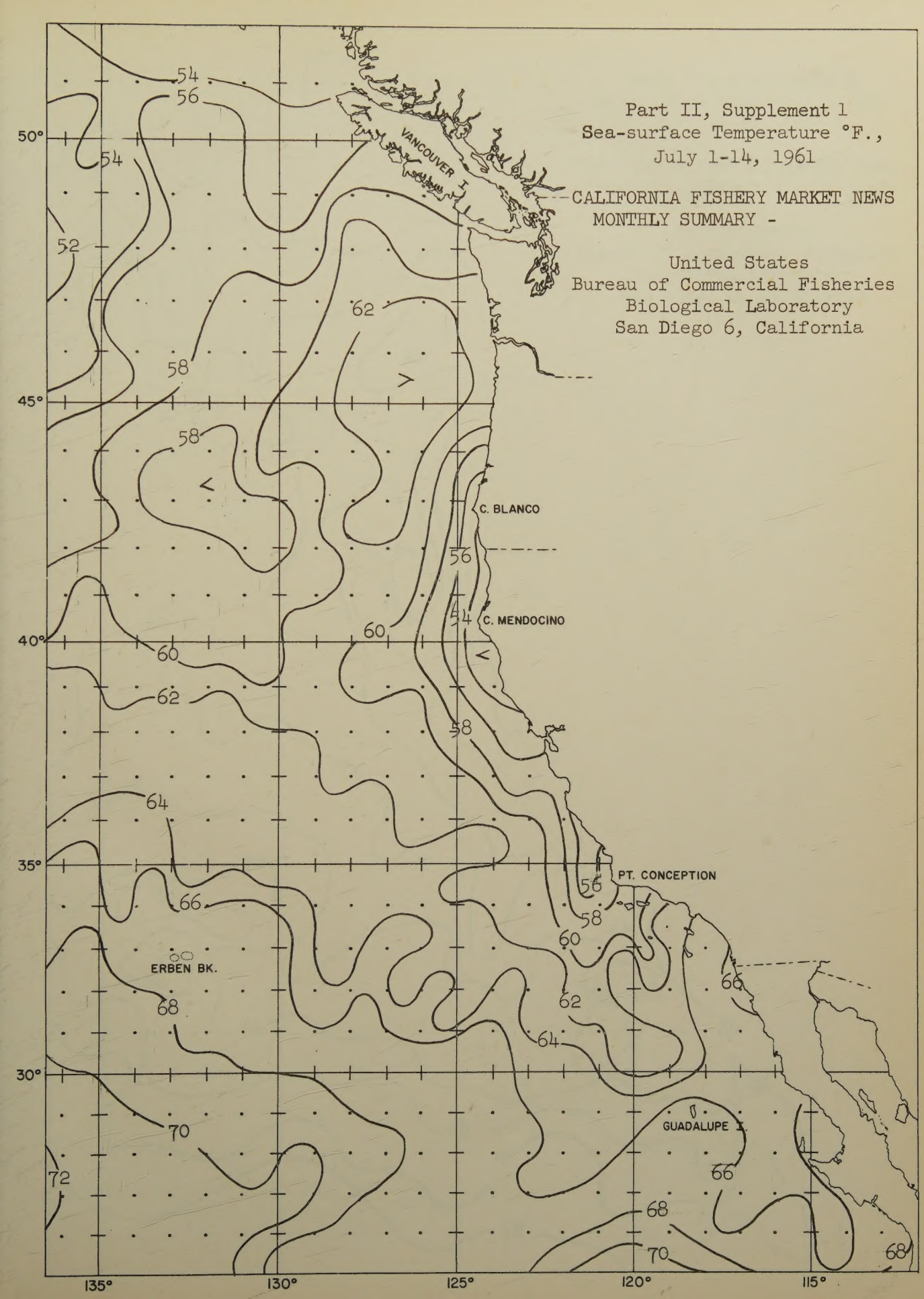


FIG.5-DEVIATION OF SEA SURFACE TEMP. (°F)
JULY 1961 — JULY 1960 BY 1-DEGREE
SQUARES. SHADED AREAS COLDER
IN 1961.
MEXICO
SOUTH
AMERICA
CALIFORNIA
Guaymas
Alamos
Masatlan
C. Sanbenitos
San Blas
C. Corrientes
Revilla Gigedo Is
Acapulco
Salina Cruz
GUATEMALA
HONDURAS
Champerico
San Jose
La Union
NICARAGUA
Corinto
Managua
Punta Arenas
COSTA RICA
Balboa
Panama
GULF OF PANAMA
Cocos I
Chipperton I
GALAPAGOS IS
Esmeraldas
C. San Francisco
Guayaquil
Lobitos
P. Paita
Matacaballo
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Mollendo
Salas y Gomez
S. Felix & S. Ambrosio
Galveston
Tampico
Vera Cruz
Progreso
Campeche
YUCATAN
Belize
Trujillo
Cartagena
Obaldia
La Palma
120°
110°
100°
90°
80°
70°




Part II, Supplement 1
Sea-surface Temperature °F.,
July 1-14, 1961
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY -
United States
Bureau of Commercial Fisheries
Biological Laboratory
San Diego 6, California
VANCOUVER I.
C. BLANCO
C. MENDOCINO
PT. CONCEPTION
ERBEN BK.
GUADALUPE I.
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°
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56
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72
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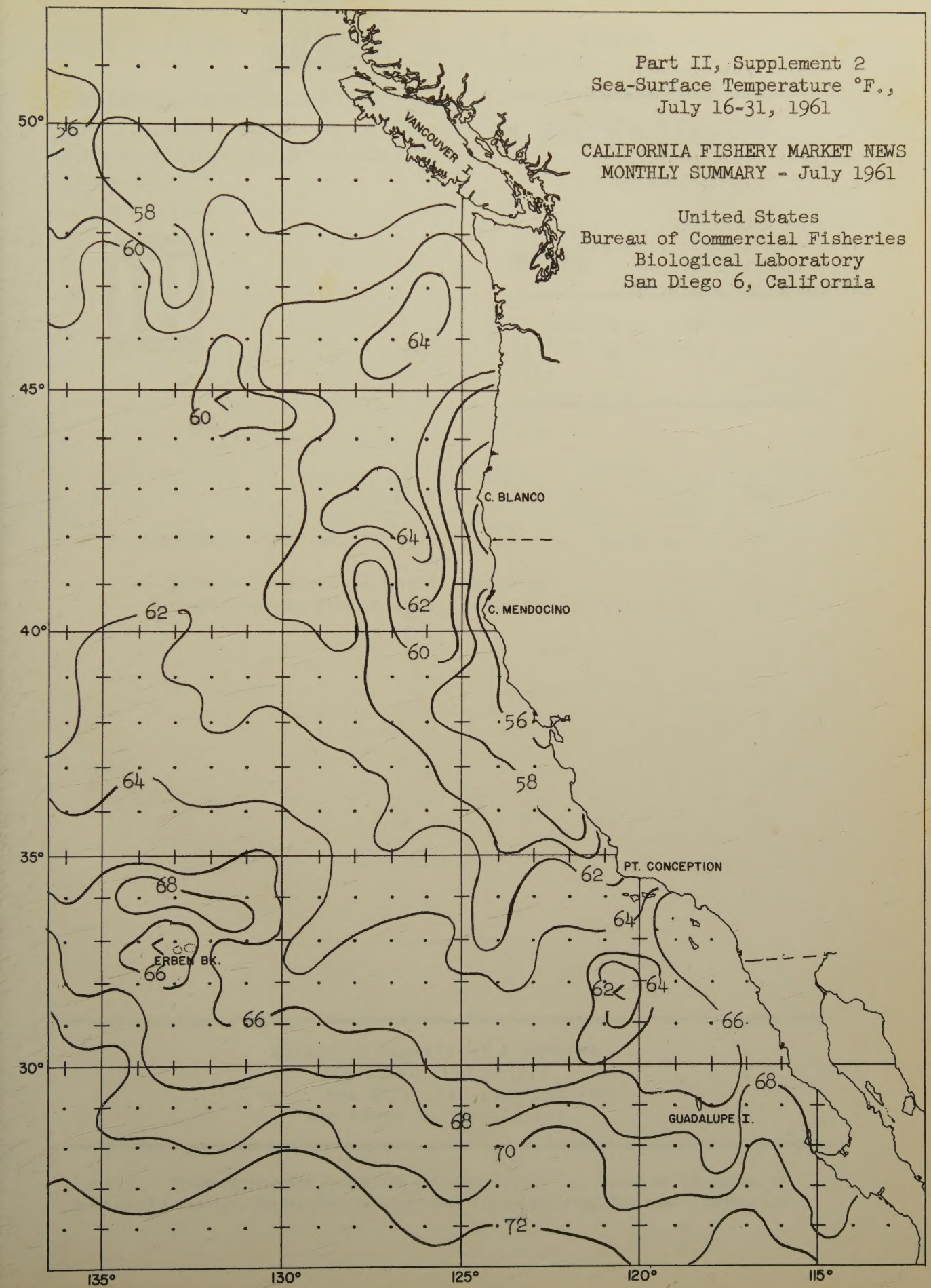
70
68


Part II, Supplement 2
Sea-Surface Temperature °F.,
July 16-31, 1961
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - July 1961
United States
Bureau of Commercial Fisheries
Biological Laboratory
San Diego 6, California
VANCOUVER I.
C. BLANCO
C. MENDOCINO
PT. CONCEPTION
ERBEN BK.
GUADALUPE I.
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°
56
58
60
64
60
64
62
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